

In the Claims:

Please amend claims 1, 3, 7, 8, 20, 22, 23, 25, 26, 27, 28, 29, 30, 31, and 32, as set forth below.

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- 1 1. (Currently Amended) A method, in a data processing system having a plurality of computing
2 nodes, of managing incoming calls for an organization having a plurality of departments[, an
3 organization database] and a plurality of agents, the method comprising the steps of:
4 receiving one or more incoming calls by a call manager object, a call manager object
5 being present in each of the plurality of computing nodes;
6 creating an associated call object for each incoming call in response to receiving the
7 incoming call;
8 playing to the caller a voice menu describing a plurality of selection items in a
9 department table corresponding to a department in the organization, each call object including
10 the department table with which the call is currently associated;
11 receiving one or more input signals from the caller in response to the voice menu played
12 to the caller; and
13 managing the incoming call according to a call-management policy based on the
14 information contained in the table and the input signals from the caller to attempt to reach one of
15 the plurality of agents of the organization.
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- 1 2. (Original) A method of managing incoming calls as recited in claim 1, wherein the step
2 of receiving an incoming call includes the steps of:
3 listening for an incoming call; and
4 connecting to the incoming call when it occurs.
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- 1 3. (Currently Amended) A method of managing incoming calls as recited in claim 1, wherein the
2 step of receiving one or more input signals from the caller includes the steps of:
3 receiving a selection event from the caller by the call object; and
4 determining from the selection event which of the selection items in the department table
5 was selected by the caller.
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1 4. (Original) A method of managing incoming calls as recited in claim 3, wherein the
2 selection event is a DTMF tone produced by the caller.

1 5. (Original) A method of managing incoming calls as recited in claim 3, wherein the
2 selection event is a recognized voice input from the caller.

1 6. (Original) A method of managing incoming calls as recited in claim 1,
2 wherein the table includes alternate routing information;
3 wherein the step of managing the incoming call according to a call-management policy
4 includes the steps of:
5 determining if an agent is available according to the department table described in the
6 voice menu;
7 if the agent is available,
8 obtaining the agent's directory number from the table, transferring the call to the agent,
9 and disconnecting from the call; and
10 if the agent is not available,
11 handling the call according to alternate routing information.

1 7. (Currently Amended) A method of managing incoming calls as recited in claim 6,
2 wherein the alternate routing information includes voice mail box information and
3 operator information;
4 wherein the step of handling the call according to the [information in the table] alternate
5 routing information includes the steps of:
6 determining whether or not voice mail box is available for the department
7 according to the table;
8 if voice mail is available, recording a message from the caller and storing it in the
9 voice mail box;
10 if voice mail is not available, determining whether the operator is available;
11 if the operator is available, transferring the caller to the operator; and
12 if the operator is not available, recording a message from the caller in the default
13 mailbox disconnecting from the caller.

1 8. (Currently Amended) A method of managing incoming calls as recited in claim 1,
2 wherein the organization has an organization database; and
3 wherein the plurality of agents includes local agents and one or more remote agents, each
4 of which can have access to the organization database.

1 9. (Original) A method of managing incoming calls as recited in claim 8, wherein a remote
2 agent is connected to the organization through an ISDN line.

1 10. (Original) A method of managing incoming calls as recited in claim 9, wherein remote
2 agents communicate information to the organization over the D-channel of the ISDN using X.25
3 protocol.

1 11. (Original) A method of managing incoming calls as recited in claim 10, wherein the
2 information communicated includes agent status and queries not visible to the caller.

1 12. (Original) A method of managing incoming calls as recited in claim 8, wherein remote
2 agents can communicate to each other and to local agents over the Internet.

1 13. (Original) A method of managing incoming calls as recited in claim 1,
2 wherein the incoming call has caller ID information associated with it; and
3 wherein the step of managing the incoming call according to the call-management policy
4 includes:
5 transferring the incoming call to an agent based on the caller ID information; and
6 disconnecting from the call.

1 14. (Original) A method of managing incoming calls as recited in claim 1, wherein the
2 department table can contain Java objects.

1 15. (Original) A method of managing incoming calls as recited in claim 14, wherein a Java
2 object in the table is a voice menu file.

1 16. (Original) A method of managing incoming calls as recited in claim 14, wherein a Java
2 object in the table is an XML object.

1 17. (Original) A method of managing incoming calls as recited in claim 14, wherein a Java
2 object in the table is a file object.

1 18. (Original) A method of managing incoming calls as recited in claim 14, wherein a Java
2 object in the table is another table object.

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2 19. (Original) A method of managing incoming calls as recited in claim 1, wherein the
department tables are JDBC-accessible tables.

1 20. (Currently Amended) A method of managing incoming calls as recited in claim 1,
2 wherein the department table has a plurality of rows and columns; and
3 wherein a row in the department table is selected by the input signals from the caller; and
4 wherein the columns of the selected row contain information used by the call manager
5 object to implement the call-management policy.

1 21. (Original) A method of managing incoming calls as recited in claim 20, wherein the
2 columns of the selected row include fields for specifying:
3 a voice menu file for selected row,
4 the availability of an agent,
5 the agent's directory number,
6 the availability of another department and
7 the availability of voice mail for the department for the call-management policy.

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1 22. (Currently Amended) A method of managing incoming calls as recited in claim 1, wherein
2 each call object is an element of an array of call objects managed by the call manager object.

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1 23. (Currently Amended) A method of managing incoming calls as recited in claim 1, wherein
2 the call manager object can invoke any one of the call objects to play a voice menu, record a
3 caller message, to transfer a call, or to obtain another department table for the call associated
with the call object.

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1 24. (Original) A method of managing incoming calls as recited in claim 1, wherein the call
2 object is capable of being coupled to an ISDN PSTN system and capable receiving notice of and
3 responding directly to ISDN events upon their occurrence.

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1 25. (Currently Amended) A method of managing incoming calls as recited in claim 1, wherein
2 the call manager object is capable of being coupled to an ISDN PSTN system and capable of
3 receiving notice of and responding directly to ISDN events upon their occurrence.

1 26. (Currently Amended) A method, in a data processing system having a plurality of computing
2 nodes, of managing incoming calls for an organization having a plurality of departments, an
3 organization database and a plurality of agents, the method comprising the steps of:
4 ◦ (a) receiving an incoming voice call by a call manager object, a call manager object being
5 present in each of the plurality of computing nodes;
6 ◦ (b) creating an associated call object for each incoming call in response to receiving the
7 incoming call;
8 ◦ (c) playing to the caller a voice menu corresponding to a plurality of selection items in a
9 department table for the organization, each call object including the department table with which
10 the call is currently associated;
11 ◦ (d) receiving an input signal from the caller in response to the voice menu played to the
12 caller, the input signal specifying one of the plurality of selection items in the department table;
13 ? (e) determining whether or not an agent is available for the selected item in the
14 department table;
15 if an agent is available,
16 ? (f) obtaining the agent's number from the department table and transferring the
17 call to the agent and continuing at step (h);
18 if an agent is not available and if another department table is available,

? (g) obtaining another department table from the organization database and
continuing at step (c); and

? (h) disconnecting from the caller.

27. (Currently Amended) A method of managing incoming calls for an organization having a plurality of departments, an organization database and a plurality of agents as recited in claim 26, further comprising the steps of:

prior [subsequent] to step (h),

5 if another department table is not available, (j) determining from the table whether
6 department voice mail is available;

if department voice mail is available, (k) recording a voice message from the caller;

if department voice mail is not available, (I) determining whether an operator is available;

if the operator is available, (m) transferring the call to the operator; and

if the operator is not available, (n) recording a voice message from the caller.

1 28. (Currently Amended) A [computer system configured to be a] call[-center] management
2 system for an organization having a plurality of departments[, an organization database] and a
3 plurality of agents, comprising:

[a computer system including a main processor] a plurality of computer processing nodes;

an ISDN interface adapter connected to multiple ISDN B-channels and at least one [the main processor] computer processing node;

8 a main memory [connected to the main processor] included in each computer processing
9 node connected to an ISDN channel, wherein the main memory stores a computer program
10 instructing the [main processor] computer processing node to carry out the steps of:

11 receiving an incoming call from a caller by a call manager object;

12 creating an associated call object for each incoming call in response to receiving
13 the incoming call;

14 playing a voice menu corresponding to a plurality of selection items in a
15 department table for the organization to the caller over an ISDN B-channel, each call of
16 including the department table with which the call is currently associated;

17 detecting incoming signals from the caller on an ISDN-B channel in response to a
18 voice message played for the caller;
19 accessing the table based on the incoming signals from the caller; and
20 connecting the caller to any available agent according to a call-management
21 policy based on the table.

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1 29. (Currently Amended) A [computer processing] storage medium for a data processing system
2 having a plurality of computing nodes, the medium [have] having stored thereon a program for
3 managing incoming calls for an organization having a plurality of departments, [an organization
4 database] and a plurality of agents, the program residing on each computing node of [instructing
5 the computer processing system] the data processing system and instructing each node to carry
6 out the steps of:
7 receiving one or more incoming calls;
8 creating an associated call object for each incoming call in response to receiving the
9 incoming call;
10 playing to the caller a voice menu describing a plurality of selection items in a
11 department table corresponding to a department in the organization, each call object including
12 the department table with which the call is currently associated;
13 receiving one or more input signals from the caller in response to the voice menu played
14 to the caller; and
15 managing the incoming call according to a call-management policy based on the
16 information contained in the table and the input signals from the caller to attempt to reach one of
17 the plurality of agents of the organization[.]

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1 30. (Currently Amended) A computer processing storage medium [have stored thereon a
2 program for managing incoming calls for an organization having a plurality of departments, an
3 organization database and a plurality of agents] as recited in claim 29, wherein the table includes
4 agent availability information and alternative routing information.

1 31. (Currently Amended) A call management software system for managing incoming calls to an
2 organization having a plurality of departments and a plurality of agents, the system comprising:

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3 a call object associated with each incoming call, the call object including a plurality of
4 call object methods and a table associated with a department, the table containing information to
5 guide the management of the incoming call; and

6 a call manager object being present in each of a plurality of computing nodes and
7 including a plurality of call manager object methods, the call manager object for creating a call
8 object for each incoming call, for embedding the table into the call object and for invoking
9 methods of the call object based on the information in the table to attempt to transfer the call to
10 an agent of the organization.

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1 32. (Currently Amended) A call management software system for managing incoming calls to an
2 organization having a plurality of departments and a plurality of agents as recited in claim 31,
3 further including a Java-ISDN interface program for implementing one or more of the call object
4 methods in native code and for providing an interface which allows the call manager object and
5 call objects to respond to hardware events pertaining to the incoming call.

1 33. (Original) A call management software system for managing incoming calls to an
2 organization having a plurality of departments and a plurality of agents as recited in claim 31,
3 wherein the table is a JDBC-accessible table.

1 34. (Original) A call management software system for managing incoming calls to an
2 organization having a plurality of departments and a plurality of agents as recited in claim 31,
3 wherein the table contains Java objects.